

REMARKS

INTRODUCTION:

In accordance with the foregoing, claims 2-4, 6, and 7, have been amended, and claim 10 has been added. No new matter is being presented, and approval and entry are respectfully requested.

Claims 2-10 are pending and under consideration. Claims 8 and 9 are withdrawn.

ALLOWED SUBJECT MATTER:

In the Office Action, at page 1, item 5, the Examiner indicated that claim 3 is allowed.

SUBSTANCE OF EXAMINER INTERVIEW

On May 4, 2005, the undersigned Applicant's representative and the Examiner discussed the Examiner's interpretation of the claims and proposed claim amendments. Specifically, positioning of the temperature sensor on the core metal was discussed.

REJECTIONS UNDER 35 U.S.C. §103:

In the Office Action, at page 3, item 6, the Examiner rejected claims 2, 4, 6 and 7 under 35 U.S.C. §103(a) as being unpatentable over Olschewski et al. (U.S. 4,946,296 – hereinafter Olschewski) in view of French et al. (U.S. Patent No. 6,161,962 – hereinafter French). The reasons for the rejection are set forth in the Office Action and therefore not repeated. Applicant traverses this rejection and respectfully requests reconsideration.

In the Office Action, at page 3, item 6, the Examiner rejected claim 5 under 35 U.S.C. §103(a) as being unpatentable over Olschewski in view of French, and further in view of Gomez et al., (U.S. 5,833,371 – hereinafter Gomez). The reasons for the rejection are set forth in the Office Action and therefore not repeated. Applicant traverses this rejection and respectfully requests reconsideration.

Amended, independent claim 2 recites: "...the temperature sensor is secured to a plate surface of the core metal in contact therewith, at an intermediate portion of the core metal, to determine a temperature of the core metal."

And amended, independent claim 6 recites: "...the temperature sensor contacting and being affixed to a plate surface of the core metal, at an intermediate portion of the core metal,

and determining a temperature of the core metal.”

Olschewski discloses a device disposed at axial ends of a bearing assembly that seals the assembly from intrusion against foreign matter, and uses a pulse generator 13 (in combination with cells 17 on a plastic ring 16) to generate electrical pulses when a rotating bearing ring of the bearing assembly rotates. (See Olschewski, for example, at Abstract, FIG. 1, col. 2, lines 33-36, and col. 2, line 65 to col. 3, line 5).

In Olschewski, (See e.g. FIG. 1) the pulse generator 13 touches only a distal end of the radial flange 8.

French discloses a bearing A that has axially disposed seals 64 to prevent intrusion of contaminants. (See French, at col. 3, lines 25-29). French also discloses sensor module B that is inserted into a module hole 74. The module hole 74 extends completely through a wall of (non-rotational) cup 46, and is positioned midway between ends of two cup raceways 58, so that an end of the sensor module B can be inserted into an aperture in the middle of the bearing A, axially between two rows of rollers 50. The sensor module B has a plurality of sensors, to sense, for example, temperature in the interior of the bearing A (temperature sensor 112), and electrical pulses (speed sensor 110) generated when target wheel 118 rotates. (See French, at FIGS. 1 and 3, and col. 5, lines 29-58).

In French, none of the sensors contact any of the seals 64.

In contrast, in the subject application, the temperature sensor is secured to a plate surface of the core metal in contact therewith, at an intermediate portion of the core metal, to determine a temperature of the core metal. Such placement of the temperature sensor has an advantage of being able to place a greater portion of the temperature sensor in contact with the core metal, and thus accuracy and precision of the temperature measurements can be increased.

Applicant respectfully submits that neither Olschewski nor French disclose or suggest “...the temperature sensor is secured to a plate surface of the core metal in contact therewith, at an intermediate portion of the core metal, to determine a temperature of the core metal.”

Further, regarding claims 4 and 7, both amended claim 4 and amended claim 7 recite: “...wherein the temperature sensor is directly molded with the elastic member.”

In rejecting claims 1 and 6, the Examiner asserts that sealing lip 22 corresponds to the claimed “elastic member.” But in Olschewski, pulse generator 13 is vulcanized into place against sheet metal reinforcing element 3 by elastic material 14, which is completely separate from

sealing lip 22. Thus, in Olschewski, the pulse generator 13 is not directly molded with the sealing lip 22.

Applicant respectfully submits that independent claims 2 and 6 patentably distinguish over the cited art, and should be allowable for at least the above-mentioned reasons. Further, Applicant respectfully submits that claims 4 and 5, which depend from independent claim 2, and claim 7, which depends from independent claim 6, should be allowable for at least the same reasons as claims 2 and 6, as well as for the additional features recited therein.

Further, Applicant respectfully submits that withdrawn claims 8 and 9, which depend respectively from independent claims 2 and 6, should be allowable for at least the same reasons as claims 2 and 6, as well as for the additional features recited therein.

NEW CLAIM:

Applicant respectfully submits that for at least similar reasons as those stated in the section regarding the rejection under 35 U.S.C. §103, new claim 10 patentably distinguishes over the cited art and should be allowable.

CONCLUSION:

In accordance with the foregoing, Applicant respectfully submits that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the cited art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

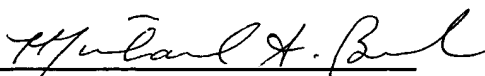
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If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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